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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,770	11/07/2000	James E. Obert	10001609-1	2515

22879 7590 07/08/2005

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EXAMINER	
POON, KING Y	
ART UNIT	**PAPER NUMBER**
2624	

DATE MAILED: 07/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/708,770	OBERT ET AL.	
	Examiner	Art Unit	
	King Y. Poon	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 April 2005 and 18 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *21-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *21-32* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 November 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/18/2005 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 28-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanson (US 6,148,346) in view of Ramberg et al (US 6,857,013) and Fan et al (US 6,219,706).

Regarding claim 28: Hanson teaches a method for remote management of one or more printing devices, (e.g., 27, 31, 29, 36, fig. 1, etc.) comprising the step of: storing (column 4, lines 35-45) a printing device management application (the software that allows the system to display menus of fig. 3-8, to show diagnostic information such as

printer maintenance menu of GUI object 52, column 7, lines 45-50, column 5, lines 12-14, fig. 8J; and to change printing device settings, column 6, lines 30-45, column 2, lines 50-65) located at the another remote diagnostic center (column 4, lines 10-column 2,lines 20-25, column 4, lines 35-57) on a remote diagnostic center computer (PC 35, fig. 1, note, all computers are diagnostic center computer because they can all display fig. 3-fig. 8), having an internet connection (Internet, fig. 1); downloading (loader, column 4, line 61, column 2, lines 20-25) the printing device management application from the remote diagnostic center computer to a computer (e.g., 23, fig. 1) located within a local area network (local net A, fig. 1), wherein the computer is connected to a printing device (27, fig. 1); obtaining diagnostic data (e.g., fig. 8J) from the printing device at the computer using the printing device management application (column 4, lines 35-67, column 5); authorizing access (firewall, fig. 1) using firewall from the computer located within the local area network to one or more third parties users (e.g., users from company B, fig. 1), wherein the third parties users do not have access to the local area network without said access authorization (inherent properties of a firewall); and enabling access by the one or more third party user to the printing device within the local area network to enable a maintenance technician (there is no reason why a person that fixed the paper jams or add toner to the printer can not see fig. 8J, fig. 8J is designed to be seen for maintenance purpose) to determine a condition of the printing device before making a service call (clearly fig, 8J can be seen by a user before as well as after a service called; note: making a service call to fixed problems is known and being used by all rational persons; in this case, making a service call to fix the printer

when the user cannot fix the problem is desirable for the user, because obviously, the user would like to have a working printer; a service call is being interpreted as having relies on others to fix the printer).

Although the status information Hanson is designed to be used for diagnosing the conditions of the printer, Hanson does not disclosed a person that is qualified to be a diagnostician for the printer.

Ramberg, in the same area of transmitting and receiving diagnostic information for printers (column 28, lines 5-30), teaches it is well known in the art to have a third party diagnostician (service technician, fig. 10C, 10B, and 11) to received diagnostic data, from a printer, at a remote diagnostic center computer (remote computing system, column 4, lines 28-35).

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hanson to include: to have a third party diagnostician (service technician) to received the diagnostic data, from the printer, at the remote diagnostic center computer.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hanson by the teaching of Ramberg because of the following reasons: (a) it would have allowed company B to fixed the problem (yes to 1101, fig. 11, Ramberg) from a technician before calling for physical service from the technician (yes to 1018, fig. 10B, Ramberg) as taught by Ramberg; and (b) it would have save company A (the owner or the printer) a lot of money if the printer can be fixed

by the printer operator of company A instead of having the technician to fixed the printer.

Although Hanson teaches firewall and that the term "firewall" is well known in the art, Hanson does not explain firewall.

Fan explains firewall in detail. Firewall is developed to protect networks (such as the A, fig. 1 of Hanson) from unauthorized accesses (column 1, lines 7-18). Firewall is used to analyze and control data that are coming from remote users into the local network and control outgoing data from the local network to the Internet (column 1, lines 7-18). One well-known firewall protocol (FTP) uses a control channel to allowed negotiation a port number for authorized communication between two computing devices (column 7-25, column 1, lines 60-65). The negotiation requires sending data on both side and the data sending from firewall side is being interpreted as "sending access authorization."

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hanson to include: sending access authorization from the computer located within the local area network to the parties that are accessing the local area network through the firewall of Hanson, to allow users that do not understand firewall would be able to make use of Hanson's invention.

Regarding claim 29: Hanson teaches wherein the user interface further comprises a locate printer feature (fig. 3-8, column 6, lines 15-30) configured to enable the user within the local area network to view status information of network-connected printers and directly-connected printers, (column 4, lines 10-20), wherein the network

and directly connected printers are located within the local area network (e.g., 27, 31, fig. 1).

Regarding claim 30: Hanson teaches wherein the printing device is connected to the first computer through a universal serial bus port, a parallel port, or a network connection (fig. 1).

Regarding claim 31: Hanson and Ramberg teach wherein the step of enable access by the one or more third party diagnosticians further comprises using the printing device management application to relinquish control of diagnostics (column 6, lines 15-30, when the access is limited, control of diagnostic can not be perform anymore; also see 1016, fig. 10B, Ramberg) for the printing device to the one or more third-party diagnosticians.

Regarding claim 32: Hanson teaches system wherein the one or more third-party diagnosticians perform diagnostics on the printing device comprising diagnostics selected from the group consisting of viewing status information, changing printer settings, and running diagnostics (fig. 8J, column 6, lines 15-25).

4. Claims 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanson (US 6,148,346) in view of Wood et al. (US 6,453,127) and Fan et al (US 6,219,706).

Regarding claim 21: Hanson teaches a system (fig. 1) for remote management (fig. 3-8) of one or more printing devices (e.g., 27, 29, 36, fig. 1) in a local area network (local net, fig. 1) having an Internet connection (Internet, fig. 1), comprising: a first

computer (e.g., 23, fig. 1) in communication with the local area network, the first computer having a connection with a printing device (27, fig. 1); a remote diagnostic center computer (PC 35, fig. 1, note, all computers are diagnostic center computer because they can all display fig. 3-fig. 8) having a separate Internet connection (fig. 1, two different company, connected to Internet through two different fire wall) and another remote diagnostic center (e.g., 38, fig. 1) with a printing device management application (the software that allows the system to display menus of fig. 3-8, to show diagnostic information such as printer maintenance menu of GUI object 52, column 7, lines 45-50, column 5, lines 12-14, fig. 8J; and to change printing device settings, column 6, lines 30-45, column 2, lines 50-65) located at the another remote diagnostic center (column 4, lines 10-column 2,lines 20-25, column 4, lines 35-57), wherein the remote diagnostic center computer does not have direct access to the local area network (fig. 1 shows the access to the local net A from B must go through two fire wall and vice versa); the printing device management application configured to be downloaded (loader, column 4, line 61, column 2, lines 20-25) to the first computer via the internet connection (fig. 1) of the local area network, wherein the printer information management application comprises a user interface (fig. 3-8) configured to be displayed on the first computer; and the user interface further comprising a share feature (column 6, lines 15-30) configured to allow a user within the local area network to enable one or more third-parties to view otherwise private information (fig. 3-8 are private information if printer accessed is limited) regarding the printing device in order to enable a maintenance technician (there is no reason why a person that fixed the paper jams or add toner to

the printer can not see fig. 8J, fig. 8J is designed to be seen for maintenance purpose) to determine a condition of the printing device before making a service call (clearly fig, 8J can be seen by a user before as well as after a service called; note: making a service call to fixed problems is known and being used by all rational persons; in this case, making a service call to fix the printer when the user cannot fix the problem is desirable for the user, because obviously, the user would like to have a working printer).

Hanson does not teach wherein the printer information management system is stored on an Internet website.

Wood, in the same area of transmitting Java applet (see column 5, lines 5-15, Wood et al and column 4, lines 60-65, Hanson) to be executed by a user's computer (computer 30, fig. 1) of displaying status/diagnostic data in the user's computer (column 5, lines 25-35), teaches to store the Java applet on an Internet (column 2, line 67) website located in a server. (The series of files that include user interface display screen pages in applets, located in a web server, is a website, for establishing a program in the user's computer, column 5, lines 5-15)

Since the printer information management system (driver portion 34 is part of the dynamic device driver system/printer information management system) of Hanson, is stored in a server within the Internet, (column 4, lines 39-42), contains Java applet programs (column 4, lines 57-67, column 5, lines 12-23) to be executed by the host computer to display printer diagnostic data (column 7, lines 42-50), it would have been obvious to a person with ordinary skill in the art at the time the invention was made to

have modified Hanson's system to include: wherein the printer information management application/driver portion 34 is stored on an Internet website.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hanson's system by the teaching of Wood et al. because of the following reasons: (a) most computers connected on Internet communicate with, and access data from websites located in server computer(s); storing the dynamic device driver system in a website would allow the dynamic device driver system of Hanson to be widely used in the Internet system by all users; and (b) it would have allowed a service person to gain access of the diagnostic data of a printer of Hanson from anywhere in the world as long as he has a computer connected to Internet.

Hanson also does not teach remote computer is used as

Regarding claim 22: Hanson teaches wherein the user interface further comprises a locate printer feature (fig. 3-8, column 6, lines 15-30) configured to enable the user within the local area network to view status information of network-connected printers and directly-connected printers, (column 4, lines 10-20), wherein the network and directly connected printers are located within the local area network (e.g., 27, 31, fig. 1).

Regarding claim 23: Hanson teaches wherein the printing device is connected to the first computer through a universal serial bus port, a parallel port, or a network connection (fig. 1).

Regarding claim 24: Hanson teaches wherein the local area network comprises a plurality of computers (fig. 1).

Regarding claim 25: Hanson teaches wherein a plurality of printers can be connected to each of the plurality of computers (fig. 1).

Regarding claim 26: Hanson teaches wherein the user within the local area network can use the printing device management application to relinquish control of diagnostics (column 6, lines 15-30, when the access is limited, control of diagnostic can not be perform anymore) for the printing device to the one or more third-parties.

Regarding claim 27: Hanson teaches system wherein the one or more third-parties perform diagnostics on the printing device comprising diagnostics selected from the group consisting of viewing status information, changing printer settings, and running diagnostics (fig. 8J, column 6, lines 15-25).

Response to Arguments

5. Applicant's arguments filed 3/18/2005 have been fully considered but they are not persuasive.

With respect to applicant's argument that Hanson does not mention firewalls with respect to communicating with printers in different networks, no mention about company A, company B PC 35 and WWW server sun; has been considered.

In reply: Hanson column 2, lines 10-20, fig. 1 teaches network 20 of company A is an intranet (LAN) and devices on network 20 is connected to network 21 (printer 36 is connected to network 21) of company B through Internet.

Although Hanson teaches firewall (fig. 1) and that the term "firewall" is well known in the art, Hanson does not explain firewall.

Fan explains firewall in detail. Firewall is developed to protect networks (such as the A, fig. 1 of Hanson) from unauthorized accesses (column 1, lines 7-18). Firewall is used to analyze and control data that are coming from remote users into the local network and control outgoing data from the local network to the Internet (column 1, lines 7-18). One well-known firewall protocol (FTP) uses a control channel to allowed negotiation a port number for authorized communication between two computing devices (column 7-25, column 1, lines 60-65). The negotiation requires sending data on both side and the data sending from firewall side is being interpreted as "sending access authorization."

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Hanson to include: sending access authorization from the computer located within the local area network to the parties that are accessing the local area network through the firewall of Hanson, to allow users that do not understand firewall would be able to make use of Hanson's invention.

With respect to applicant's argument that Hanson does not teach how computers on the LAN can communicate with computers of peripheral on a separate LAN, has been considered.

In reply: Column 4, lines 10-20 Hanson teaches computers on the LAN can communicate with computers of peripheral on a separate LAN through the use and Internet and Hanson's invention- components of the dynamic device driver.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is 571-272-7440. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 29, 2005

KING Y. POON
PRIMARY EXAMINER